

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-16. (canceled)

17. (new) A process for the production of smoke adapted for smoking foodstuffs, said smoke being obtained by pyrolysis of an organic material, said process comprising:

- introducing said organic material to be pyrolyzed into a pyrolysis reactor comprising a heatable chamber substantially sealed, containing at least one ascending tubular element that is vibrated and receiving said organic material, said material being introduced at the level of the lower portion of said tubular element,

- heating said organic material by direct heating of the tubular element or elements, in said chamber at a temperature comprised between 300°C and 400°C so as to produce pyrolysis during its movement, under the effect of vibrations, in the ascending tubular element or elements, and

- extracting the consumed organic material and the produced smoke at the level of the upper portion of said tubular element or elements.

18. (new) The process according to claim 17, wherein the tubular element or elements are given a vibratory movement having a horizontal and/or vertical component.

19. (new) The process according to claim 17, wherein the organic material is dried by preheating before it is pyrolyzed.

20. (new) The process according to claim 17, wherein the smoke produced is condensed at the outlet of the reactor in a suitable condensation device.

21. (new) The process according to claim 17, wherein at least one portion of the pyrolysis gas present at the outlet of the condensation device is re-injected into the reactor.

22. (new) The process according to claim 17, wherein pyrolysis takes place under strict control, to about 0.1%, of the volume content of oxygen in said reactor.

23. (new) The process according to claim 17, wherein pyrolysis takes place under precise control, to about one degree Celcius, of the temperature prevailing in said reactor.

24. (new) The process according to claim 17, wherein the pyrolyzed organic material consists essentially of woodchips.

25. (new) The process according to claim 17, wherein the pyrolyzed organic material consists essentially of fibers or chips of at least one vegetable substance.

26. (new) A smoke adapted for smoking foodstuffs obtained by the process according to claim 17, wherein said smoke is condensed into liquid smoke, a volume content of benzo[a]pyrene of at most 10 ppb and a volume content of benzoanthracene of at most 20 ppb.

27. (new) A liquid smoke obtained by condensation of smoke according to claim 26.

28. (new) A foodstuff comprising the smoke according to claim 26.

29. (new) A wood charcoal produced by the process according to claim 17.

30. (new) A process for producing liquid smoke flavor, comprising:

- introducing organic material to be pyrolyzed into a pyrolysis reactor,

- heating said organic material by direct heating of the tubular element or elements, in said reactor at a temperature comprised between 300°C and 400°C so as to produce pyrolysis under the effect of vibrations, and

- extracting consumed organic material and said liquid smoke.

31. (new) The process according to claim 30, wherein the organic material is dried by preheating before it is pyrolyzed.

32. (new) The process according to claim 30, wherein pyrolysis takes place under strict control, to about 0.1%, of the volume content of oxygen in said reactor.

33. (new) The process according to claim 30, wherein the pyrolyzed organic material consists essentially of woodchips.

34. (new) A liquid smoke obtained by condensation of smoke according to claim 30.